UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,292	09/25/2000	Andreas Meyer	32238W020	1281

7590 09/11/2003

Smith, Gambrell & Russell, LLP
Beveridge, DeGrandi, Weilacher & Young
Intellectual Property Group
1850 M Street, N.W., Suite 800
Washington, DC 20036

EXAMINER	
MAKI, STEVEN D	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 09/11/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/668,292	MEYER ET AL.	
	Examiner	Art Unit	
	Steven D. Maki	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8-10,12 and 14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8-10, 12 and 14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DECISION ON
REQUEST FOR CORRECTION OF INVENTORSHIP UNDER 37 CFR 1.48(a)

1) In view of the papers filed 5-9-03, it has been found that this nonprovisional application, as filed, through error and without deceptive intent, improperly set forth the inventorship, and accordingly, this application has been corrected in compliance with 37 CFR 1.48(a). The inventorship of this application has been changed by adding Felix Hubner as co-inventor of application 09/668292.

The request for correction of inventorship under 37 CFR 1.48(a) has been GRANTED.

The application will be forwarded to the Office of Initial Patent Examination (OIPE) for issuance of a corrected filing receipt, and correction of the file jacket and PTO PALM data to reflect the inventorship as corrected.

2) The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3) Claims 8-10, 12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8, the underlining in the last line of claim 8 makes it unclear if claim 8 requires $0.1\ TW < TW_1 < 0.7\ TW$ or $0.1\ TW \leq TW_1 \leq 0.7\ TW$.

4) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5) **Claims 8-10, 12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Iwasaki et al (US 6073668).**

See figure 14. Claim 8 fails to exclude using more than four radii.

Applicant argues that the 102 rejection is moot because claim 8 has been amended to specify four different radii. This argument is not persuasive since claim 8 is not limited to only four radii. Claim 8 fails to require "only four different radii". The claimed forth radius reads on for example radius R110 and does not exclude radii R130, R190, R270, R400 and R550; it being noted that the claimed radius TR_1 reads on radius R1100, claimed radius TR_2 reads on radius R750 and claimed radius TRA reads on radius R600.

6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7) **Claims 8-10, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '802 (JP 4-87802) in view of Tokutake (US 5117886) and optionally Iwasaki et al (US 6073668).**

Japan '802, Tokutake and the optional Iwasaki et al are applied as in paragraph 9 of the last office action dated 3-4-03 (paragraph 9 of the last office action dated 3-4-03

is incorporated herein by reference). As to the addition of both the limitation of the separation of TW_1 and the limitation of distance RA into claim 8 by the amendment filed 7-7-03, the following is set forth: As to TW_1, the limitation of the area for first radius TR_1 being 10-70% tread width TW would have been obvious in view of Japan '802's teaching to use first radius RC to define center section SC which has a width of 35% of tread width WT. As to distance RA, the limitation therein regarding the location of the transition to the shoulder radius (fourth radius) would have been obvious in view of Tokutake's teaching to locate a fourth radius at a small outmost region 26d of a tread in order to improve the tire ground contact performance.

Applicant argues that the references fail to show any of the precise relationships set forth in the claims. The examiner disagrees. The claimed invention and Japan '802 are compared below:

	invention of claim 8	**Japan '802**
radius TR_1	yes	yes
radius TR_2	10-95% TR_1	65-81% TR_1
radius TRA	5-65% TR_1	6-9% TR_1
fourth radius	yes	----------

Japan '802 does not recite a fourth radius. However, Tokutake motivates one of ordinary skill in the art to use a fourth radius for the tread of Japan '802 to improve ground contact performance. One of ordinary skill in the art would readily appreciate that Tokutake's benefit of improving ground contact performance of a tire is desired for Japan '802's tire since (a) Japan '802 uses progressively decreasing radii to define the

tread surface in order to improve high speed steering stability and (b) Tokutake's teaches using progressively decreasing radii to define the tread surface for a high performance tire (a tire for high speed running). Iwasaki et al (optionally applied) is additional evidence of the desirability of using more than three radii. Iwasaki et al, like applicant, uses multiple radii to obtain uniform ground contact pressure. Compare page 3 of applicant's specification and col. 1 lines 32-35 of Iwasaki et al. Hence, applicant's benefit of using four radii to improve pressure distribution in the ground contact area is recognized by the applied prior art.

As to Japan '802, applicant argues that Japan '802 does not teach $0.1\ TW \leq TW_1 \leq 0.7\ TW$. Applicant is incorrect. Japan '802 suggests $TW_1 = 35\%\ TW$ which falls within the claimed range of 10-70% TW. Applicant's comment that the office action refers to TR_1 whereas claim 8 refers to TW_1 is not understood since TW_1 is the width of the region of the tread surface defined by TR_1.

As to Tokutake, applicant argues that no reason, motivation or suggestion appears in Tokutake which would enable a person skilled in the art to arrive at the parameters set forth in claim 8. In claim 8, the distance RA of 1.5-14% defines the area of the tread defined by the fourth radius. This claimed area defined by the fourth radius corresponds to area 26d shown by Tokutake. As can be seen from a cursory comparison of applicants figure 2 and Tokutake's figure 1, applicant's region having width RA has a size similar to the size of region 26d of Tokutake. The claimed specific width of the area defined by the fourth radius (1.5-14%) would have been obvious and could have been determined without undue experimentation in view of Tokutake's

teaching to use four or more different regions of curvature *to improve the tire ground contact property* wherein illustrated region 26d (which is defined by the smallest radius) is a relatively small percentage of the tread width. Tokutake's teaching to improve ground contact property provides ample guidance as to what the width of the region defined by the fourth radius (distance RA) can and should be.

As to Iwasaki, applicant argues that Iwasaki teaches continuously decreasing the curvature of the tire from the tire equator to the tread edges and thereby does not motivate one of ordinary skill in the art to form a tire having four distinct sections, each with a constant radius. Applicant's argument is not commensurate in scope with the claims and is therefore not persuasive since none of the claims require only four radii. Furthermore, applicant's above noted argument does not address Iwasaki et al's teaching to improve pressure distribution in the ground contact area using decreasing radii.

Remarks

8) Applicant's arguments filed 7-7-03 have been fully considered but they are not persuasive.

The objection to the specification has been withdrawn in view of the amendment filed 7-7-03.

The 112 first and second paragraph rejections have been withdrawn in view of the amendment filed 7-7-03.

9) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki 9-9-03

STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
AU 1733

Steven D. Maki
September 9, 2003